



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

REPLY BRIEF FOR THE APPELLANTS

Ex parte Stefano FACCIN et al.

SYSTEM AND METHOD OF CONTROLLING APPLICATION LEVEL ACCESS
FOR SUBSCRIBER TO A NETWORK

Serial No. 09/731,758

Appeal No.:

Group Art Unit: 2152

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In re the Appellant:

Stefano FACCIN, et al.

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Filed: December 8, 2000

Examiner: D. Chankong

For: SYSTEM AND METHOD OF CONTROLLING APPLICATION LEVEL
ACCESS FOR SUBSCRIBER TO A NETWORK

REPLY BRIEF

April 4, 2008

I. INTRODUCTION

This Reply Brief is filed in response to the Examiner's Answer dated February 4, 2008. In that Examiner's Answer, a number of grounds for rejection have been withdrawn; the rejection of claims 1, 34, 37, 68, 78, and 85 under 35 U.S.C. § 103(a) as being unpatentable over Lahtinen et al in view of Akhtar et al. In addition, the rejection of claims 1, 34, 37, 68, 78, and 85 under 35 U.S.C. § 103(a) as being unpatentable over Hoffman in view of Roy is also withdrawn. This Reply Brief, therefore, is submitted to address the arguments presented in the Examiner's Answer.

This Reply Brief addresses a few of the deficiencies of the Examiner's Answer. Appellant's Appeal Brief, however, is maintained, and failure to repeat the

arguments contained therein, or to address one or more argument set forth in the Examiner's Answer should not be construed as waiver or an admission. The Appeal Brief speaks for itself, and this Reply Brief merely supplements the Appeal Brief to address certain aspects of the Examiner's Answer.

II. STATUS OF CLAIMS

Claims 1-85 all of the claims pending in the present application, are the subject of this appeal. Claims 1, 34, 37, 68, 78 and 85 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2001/0031635 to Baharatia (hereinafter Baharatia). Claims 1-31 and 34-85 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,742,668 Pepe (hereinafter Pepe) in view of U.S. Patent No. 6,611,685 to Rune (hereinafter Rune). Claims 32 and 33 under 35 U.S.C. 103(a) were rejected as being unpatentable over Pepe in view of U.S. Patent No. 6,148,199 to Hoffman (hereinafter Hoffman).

III. APPELLANTS' ARGUMENTS

REJECTION UNDER 35 U.S.C. 102(E) OF CLAIMS 1, 34, 37, 68, 78 AND 85 BY BHARATIA

Contrary to the contentions made in the Examiner's Answer, Salim does not teach or suggest the particular recitations of independent claim 1. Although the

Examiner's Answer refers to similar portions of Bharatia as done in previous Office Actions in an attempt to reach the features recited in independent claims 1, 34, 37, 68, 78, and 85, for instance, such portions of Bharatia do not teach or suggest the features of independent claim 1.

Contrary to the contentions made in the Examiner's Answer, Bharatia does not teach or suggest, at least, "controlling access of the subscriber to a network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses," as recited in independent claim 1 and similarly recited in independent claims 34 and 85. Instead, Bharatia provides that the **HSS 112 is responsible for storing** and managing the following subscriber related information: (1) Subscriber Identification, Numbering and addressing information; (2) User Security information, e.g., Network access control information for authentication and authorization; (3) User Location information at inter-system level (HSS 112 handles the user registration, and stores inter-system location information, etc.); and (4) The subscriber profile, e.g., services supported, service specific information, etc. See paragraph [0081]. (Emphasis added)

Bharatia further provides that **based upon this subscriber information, the HSS 112 is also responsible for supporting the call control and short message entities of the different control systems**, e.g., circuit switched domain control, packet switched domain control, IP multimedia control, etc., offered by the

system operator. (Emphasis added) However, contrary to the contentions made in the Examiner's Answer, Bharatia does not teach or suggest, at least, "in response to the identification of the subscriber and access to be provided to the subscriber, **storing, in the visited network**, a subscriber profile of an authorized access of a plurality of authorized accesses to be provided to the subscriber; and controlling access of the subscriber to a network dependent **upon a comparison of the access** to be provided to the subscriber **and the stored subscriber profile** having the authorized access of the plurality of authorized accesses," as recited in independent claim 1 and similarly recited in independent claims 34 and 85. (Emphasis added) Bharatia does not teach or suggest that the CSCF 110B stores the subscriber profile of an authorized access and that the controlling access of the subscriber is upon a comparison on the access provided by the HSS 112 and the stored subscriber profile stored in the CSCF 110B. Rather, Bharatia clearly provides that the HSS 112 is responsible for storing the subscriber related information. Based upon this subscriber information, the HSS 112 is also responsible for supporting the call control and short message entities of the different control systems. Therefore, there is no teaching or suggestion in Bharatia of a comparison between access provided and the stored subscriber profile between the HSS 112 and the CSCF 110B. Bharatia fails to teach or suggest, at least, "controlling access of the subscriber to a network dependent upon a comparison of the access to be provided to the subscriber and the stored

subscriber profile having the authorized access of the plurality of authorized accesses,” as recited in independent claim 1 and similarly recited in independent claims 34 and 85.

Specifically, Applicants respectfully submit that the arguments submitted in the Appeal Brief for the Appellant are not misplaced or incomplete. The Examiner’s Answer focuses once again on paragraphs [0078] and [0081] of Bharatia as teaching “in response to the identification of the subscriber and access to be provided to the subscriber, storing, in the visited network, a subscriber profile of an authorized access of a plurality of authorized accesses to be provided to the subscriber,” as recited in independent claim 1 and similarly recited in independent claims 34, 37, 68, 78, and 85. As submitted in the Description of the Prior Art of the present application, access to a home network, through a visited network has been limited to a single level of access. As a result, subscriber equipment has not been portable across multiple visited networks which are connected to a home network in view of their functionality being limited to a single level or type of access. See, for instance, page 1, lines 8-11 of the present application. Bharatia clearly submits access to the HSS through the CSCF being limited to a single level of access. Bharatia is limited to providing that the CSCF 110B may cache access related information e.g., terminal IP address(es) where the subscriber may be reached, etc. See paragraph [0078] The HSS 112 is responsible for storing and managing the following subscriber related information: (1) Subscriber Identification,

Numbering and addressing information; (2) User Security information, e.g., Network access control information for authentication and authorization. See paragraph [0113] Therefore, the configuration of Bharatia provides for a single authorized access. It is not possible for the configuration of Bharatia to provide “an authorized access of a plurality of authorized accesses to be provided to the subscriber,” as recited in the independent claims. Bharatia limits to providing that the access related information may include terminal IP addresses where the subscriber may be reached; however, nothing is described in Bharatia of an authorized access of a plurality of authorized accesses to be provided to the subscriber.

Furthermore, Bharatia fails to teach or suggest, at least, “on page 13 of the Examiner’s Answer, it is indicated that “wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located,” as recited in independent claim 1 and similarly recited in independent claims 34, 37, 68, 78, and 85. The Examiner’s Answer refers to paragraphs [0140] and [0141] of Bharatia as describing such feature. However, the referred portion of Bharatia simply provides that for updating location information, the new SGSN sends a Location Update Request message to the new MSC/VLR (I). See FIG. 6. Using information in this message, the new MSC/VLR creates an association with the new SGSN by storing the new SGSN Number. It

appears that the Examiner's Answer has disregarded the clear features recited in the independent claims. As recited, the visited network is the network that transmits the updated location message to the home network to inform the home network of the identification of the subscriber and the particular network at which the subscriber is located. Such features are not shown in FIG. 6 nor described in the corresponding description.

Furthermore, it is submitted on page 13 of the Examiner's Answer that "it would have been obvious to one of ordinary skill in the art that the "update location" message would include an identification of the subscriber and the new network." "Anticipation requires the presence in a single prior art reference the disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GMBH v. American Hoise and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir 1984). The Patent Office has the burden of making out a *prima facie* case, which requires it to produce the factual basis for its rejection in an application under §§102 and 103. *In re Warner*, 154 USPQ 173, 177 (CCPA 1967) Applicants respectfully submit that the Examiner's Answer improperly submits an obviousness contention in an anticipatory rejection. Applicants respectfully submits that because Bharatia fails to teach or suggest each and every element of the claimed invention. Bharatia does not teach or suggest, at least, "wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification

of the subscriber and a particular network at which the subscriber is located,” as recited in independent claim 1 and similarly recited in independent claims 34, 37, 68, 78, and 85.

Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §102(e) should be withdrawn because Bharatia fails to teach or suggest each feature of claims 1, 34, 37, 68, 78 and 85 and related dependent claims.

REJECTION UNDER 35 U.S.C. 103(a) OF CLAIMS 1-31 and 34-85 OVER PEPE IN
VIEW OF RUNE

According to the Examiner’s Answer, Pepe teaches all of the elements of claims 1 and 85 except for disclosing an update location message. Therefore, the Office Action combined the teachings of Pepe and Rune in an effort to yield all of the elements of claims 1-31 and 34-85. The rejection is traversed as being based on references that neither teach nor suggest the novel and non-obvious combination of features clearly recited claims 1-31 and 34-85.

Pepe relates to an electronic messaging network. Pepe describes a personal communications interworking (PCI) 40 connected between wireless network 39 and wireline network 29. PCI 40 permits the mobile communications subscriber to send and receive messages between disparate networks, messaging systems and a variety of service providers. Figure 3 of Pepe shows PCI 40 and a PCI database 44 that stores and updates subscriber profiles. Pepe describes that

the PCI provides the subscriber with control over the message routing and delivery by the subscriber accessible “subscriber profile” stored in the PCI. The subscriber profile contains subscriber programmed instructions on message receipt, origination and notification. PCI 40 operates as a messaging gateway for providing access to multiple wireline and wireless networks, while using subscriber profile information to control sending and receiving options. PCI 40 allows wireless service providers to integrate the voice messaging, e-mail, and fax message services for one subscriber through a single telephone number. Thus, Pepe describes one phone number that provides a single link between the service provider and the subscriber’s voice and data communications lines.

Rune discloses that a gateway location register receives a reset message from a home location register when the home location register is recovering from a fault. The gateway location register determines which mobile subscribers are associated with the home location register. The gateway location register sends a reset message, with the gateway location register number instead of the home location register number, to a visited location register where at least one of the mobile subscribers associated with the home location register is located. The reset message causes the visited location registers to begin a location updating procedure. The gateway location register receives an update location message from a visited location register that received the reset message. If a “location information confirm in HLR” flag is set to not confirmed, the gateway location

register will respond to the update location messages after sending subscription information for the mobile subscriber; otherwise, the gateway location register sends an update location message to the home location register. See at least Col. 5, line 56-Col. 6, line 54 and Figures 6A and 6B.

Applicants submit that the combination of Pepe and Rune fails to teach or suggest the combination of features recited in claims 1-31 and 34-85. Pepe is devoid of any teaching or suggestion providing, at least, “controlling access of the subscriber to a network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses,” as recited in independent claim 1 and similarly recited in independent claim 85. The sole comparison that Pepe appears to perform is whenever the PCI server 48 detects any wireless messaging activities to or from a particular subscriber, the time-stamp is updated to the current time. The stored time-stamp of a registered subscriber is periodically compared to the current time. When a predetermined time elapses, the PCI server 48 assumes that the subscriber is out of radio coverage or has quit the PCI application. Such comparison is not teaching or suggesting the comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses of the present application.

Rune does not cure any of the deficiencies of Pepe. Rune is devoid of any teaching or suggestion providing, at least, “controlling access of the subscriber to

a network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses,” as recited in independent claim 1 and similarly recited in independent claim 85. Furthermore, unlike what is alleged in the Examiner’s Answer, Rune does not teach or suggest that the visited network transmits an update location message to the home network for informing the home network of the identification of the subscriber. Rather, in Rune the subscription information is sent from the gateway location register to the visited location register if a “location information confirm in HLR” flag is set to not confirm when the gateway location register receives the update location message from the visited location register.

It is respectfully submitted that Rune cannot be interpreted as curing any of the significant deficiencies in Pepe which are discussed above. Furthermore, as noted above, Applicants respectfully submits that it is well established in United States patent law that it is improper to ignore specific limitations of a claimed invention which distinguish over a cited reference or references. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Pepe nor Rune, whether taken singly or combined teaches or suggest each feature of claims 1, 34, 37, 68, 78 and 85, and hence dependent claims 2-32, 35-36, 38-67, 69-77 and 79-84 thereon, at least for their dependence on the independent claims in addition to the additional limitations

recited in each of claims 2-32, 35-36, 38-67, 69-77 and 79-84.

REJECTION UNDER 35 U.S.C. 103(a) OF CLAIMS 32 and 33 OVER PEPE IN VIEW OF
RUNE AND HOFFMAN

Claims 32 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe in view of Rune and Hoffman. According to the Office Action, Pepe and Rune teaches all of the elements of claims 32 and 33 except for the application level registration message. Therefore, the Examiner's Answer combined Pepe, Rune, and Hoffman in an effort to yield all of the elements of claims 32 and 33. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claims 1, upon which claims 32 and 33 depend.

The descriptions and arguments supporting the patentability of independent claim 1 previously submitted in view of Pepe and Rune are incorporated herein. Hoffman discloses that a typical communications network includes a home location register (HLR) that includes user information, user profiles, feature activation status, and access privileges. When a network equipment receives a request for registration from a communication unit, the network equipment accesses the HLR, finds a corresponding subscriber record and determines what features to activate for the communication unit. The information is transferred to a visitor location register (VLR) which tracks the communication unit's location in the system.

Claim 32 and 33 depend on claim 1. Hoffman does not cure the deficiencies of Pepe and Rune. Hoffman is devoid of any teaching or suggestion providing, at least, “controlling access of the subscriber to a network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile having the authorized access of the plurality of authorized accesses,” as recited in independent claim 1. There is no description or suggestion provided in Hoffman of a comparison as performed and recited in independent claim 1.

Furthermore, Pepe, Rune, and Hoffman, individually or combined, fail to teach or suggest, at least, “wherein an application level registration message including the identification of the subscriber and is generated in response to a request from a subscriber equipment to the visited network and wherein the visited network receiving the request transmits an update location message to the home network for informing the home network of the identification of the subscriber and a particular network at which the subscriber is located,” as recited in claim 1, upon which claims 32 and 33 depend. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Pepe nor Hoffman, whether taken singly or combined teaches or suggest each feature of claim 1, and hence dependent claim 32 and 33 thereon.

IV. CONCLUSION

For all of the above noted reasons, it is strongly submitted that certain clear differences exist between the present invention as claimed in claims 1-85 and the prior art relied upon by the Examiner. It is further submitted that these differences are more than sufficient that the present invention would not have been obvious to a person having ordinary skill in the art at the time the invention was made. This final rejection being in error, therefore, it is respectfully requested that this Honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case regarding the rejection of claims 1-85, and indicate the allowability of all of pending claims 1-85.

In the event that this paper is not being timely filed, the applicant respectfully petitions for any appropriate extension of time.

Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Alicia Choi', with a large, sweeping flourish extending to the right.

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